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RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/09/751,962

TIME: 18:46:52

Input Set : N:\Crif3\RULE60\09751962.raw

Output Set: N:\CRF3\01242002\I751962.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: CATCHESIDE; DAVID E.

7 (ii) TITLE OF INVENTION: REAGENTS AND METHODS FOR DIVERSIFICATION
8 OF DNA

10 (iii) NUMBER OF SEQUENCES: 2

12 (iv) CORRESPONDENCE ADDRESS:

13 (A) ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt

14 (B) STREET: 3100 Norwest Center, 90 South 7th Street

15 (C) CITY: Minneapolis

16 (D) STATE: MN

17 (E) COUNTRY: USA

18 (F) ZIP: 55402

20 (v) COMPUTER READABLE FORM:

21 (A) MEDIUM TYPE: Diskette

22 (B) COMPUTER: IBM Compatible

23 (C) OPERATING SYSTEM: DOS

24 (D) SOFTWARE: FastSEQ for Windows Version 2.0

26 (vi) CURRENT APPLICATION DATA:

C--> 27 (A) APPLICATION NUMBER: US/09/751,962

C--> 28 (B) FILING DATE: 29-Dec-2000

29 (C) CLASSIFICATION:

31 (vii) PRIOR APPLICATION DATA:

32 (A) APPLICATION NUMBER: 08/977,171

33 (B) FILING DATE:

37 (viii) ATTORNEY/AGENT INFORMATION:

38 (A) NAME: Skoog, Mark T

39 (B) REGISTRATION NUMBER: 40,178

40 (C) REFERENCE/DOCKET NUMBER: 10552.13US01

42 (ix) TELECOMMUNICATION INFORMATION:

43 (A) TELEPHONE: 612-332-5300

44 (B) TELEFAX: 612-332-9081

45 (C) TELEX:

49 (2) INFORMATION FOR SEQ ID NO: 1:

51 (i) SEQUENCE CHARACTERISTICS:

52 (A) LENGTH: 9775 base pairs

53 (B) TYPE: nucleic acid

54 (C) STRANDEDNESS: single

55 (D) TOPOLOGY: linear

57 (ii) MOLECULE TYPE: Genomic DNA

59 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

61 GATCGCAACT GGAGATCACT CGCACCGTGC CGCAGAACAA GGGCGACGAG CCTCAGGGCA 60

62 GTTTAGCCTG CCGTAACAGC ACAGACCATA GCTTATTTTC ACCTGGGCGG GCGGGCGACG 120

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63	GCGGCACTGA	CATCGGCAAG	GCGGCATCAA	GCAACCCCTC	TGTTGCTTGC	CAGCTGCCGG	180
64	CCAACGTCAG	CGGTACAAGG	AGAAATCTGG	AAGGAAAGAC	TTCTGGCACC	GACAGGATGG	240
65	CACGCGGGAA	AAGTTCCCAA	TGCATGAGAT	GAGGGGCATT	TGCATTGCCT	CCCGTCACAC	300
66	TGCCCCGCGA	CCCCAACCCC	ACCATAGCGT	CTGTCTGATC	ATGGAGCGCG	AAGTCGAGAA	360
67	ACCTGTAATT	CCTGGTAACT	TTCAGGTACA	CAGTACGTAC	TGATCCTGGT	ATCAAACCTT	420
68	GCCTGCCGAG	TTTTCGACGG	AAAGAGGTGT	GAATTGTGAA	AGAGTCATAC	CAAATCACCC	480
69	GATTTTCATA	AAGCCCAGAGT	CTTTTCTGTA	CATAAGCGAC	ACTCGAAGCG	GGCCTCATCT	540
70	TCATAGCCTG	ATAGCTTGTA	ATACTCCATC	CTCGTATCTC	ACTTGACCTT	GAGTTCAACC	600
71	CCACGTCAGA	CTTCACCCGA	CACATCGACG	GATTGGGGAA	CAGCACAATA	CCTGAAAAGC	660
72	GAGAAAACCA	AACAGAGGAA	AACACCATGG	AGACAACACT	TCCCCCTCCC	TTCTCTGTCG	720
73	GTGTCAAGTG	TCCTCCCGGA	CTGAATGACA	TCAAGGAGGG	CCTCAGCCGG	GAGGAAGTCT	780
74	CGTGCTTGG	CTGCGTCTTC	TTGAGGTCA	AGCCCAAGAC	CCTTGAGAAA	ATCGTGCGAT	840
75	TCCTCAAGCG	TCACAATGTC	GAATTTGAGC	CCTACTTCGA	TGTAACAGCC	CTCGAGTCTA	900
76	TCGATGATAT	TATCACTCTT	CTGGACGCCG	GCGCCCGCAA	GGTGTGTTGC	AAGACCGAGC	960
77	AGTTGGCCGA	CCTCTCCGCA	TATGGCTCCC	GCGTTGCCCC	CATTGTCACT	GGAAGCAGCG	1020
78	CTGCTTTGCT	TTCTCCCGCC	ACCGAGAGCG	GCCTTTTGCT	CTCCGGCTTC	GATCAGACTG	1080
79	CCTCCGAGGC	TGCACAGTTT	CTGGAGGAGG	CCAGAGACAA	GAAAATTACC	CCCTTCTTCA	1140
80	TCAAGCCCGT	TCCTGGGGCC	GATCTCGAAC	AGTTCATCCA	GGTCGCCGCC	AAGGCTAACG	1200
81	CCATCCCCAT	CCTGCCATCC	ACTGGCTTGA	CAACAAAGAA	GGACGAGGCC	GGAAAGCTTG	1260
82	CCATCTCCAC	CATCTCTCG	AGCGTCTGGA	AGTCTGACCG	TCCCGATGGT	CTGCTCCCCA	1320
83	CCGTTGTGCT	TGATGAGCAC	GACACTGCTC	TGGGTCTGGT	CTACAGCAGT	GCCGAGAGTG	1380
84	TGAACGAGGC	CCTCAGGACA	CAGACTGGTG	TCTATCAGAG	CCGGAAGCGC	GGTCTCTGGT	1440
85	ACAAGGGTGC	TACTTCCGGA	GACACTCAGG	AGCTCGTCCG	CATCTCGCTT	GACTGCGATA	1500
86	ACGATGCTCT	CAAGTTTGTC	GTGAAGCAGA	AGGGTCGTTT	CTGCCACCTC	GATCAGTCCG	1560
87	GCTGCTTTGG	TCAGCTCAAA	GGCCTTCCCA	AGCTCGAGCA	GACTTTGATT	TCGAGGAAAC	1620
88	AGTCTGCCCC	CGAGGGCTCC	TACACTGCCC	GTCTCTTCTC	CGATGAGAAG	CTAGTCCGGG	1680
89	CCAAGATCAT	GGAGGAGGCT	GAGGAGCTCT	GCACCGCTCA	GACCCCCCAG	GAAATCGCCT	1740
90	TTGAGGCTGC	CGATCTCTTC	TACTTTGCTC	TTACCAGGGC	CGTTGCTGCC	GGCGTTACTC	1800
91	TTGCCGATAT	CGAAAGGAGC	CTTGACGCCA	AGAGCTGGAA	GGTCAAGCGC	AGGACTGGAG	1860
92	ATGCTAAGGG	TAAGTGGGCT	GAGAAGGAGG	GCATCAAGCC	TGCGGGCTGG	GCTCCCGCTG	1920
93	CCACTTCGGC	CCCTGTCACC	AAGGAGGCCG	CCCAGGAGAC	CACCCCTGAG	AAGATCACCA	1980
94	TGAGACGTTT	CGACGCCTCC	AAGGTCTCTA	CCGAGGAGCT	CGATGCTGCT	CTCAAGCGTC	2040
95	CTGCGCAAAA	GTCGTCCGAT	GCCATCTACA	AGATCATTGT	CCCCATCATC	GAGGACGTCC	2100
96	GCAAGAACGG	CGACAAGGCT	GTTCTGTGCT	ACACTCACAA	GTTGAGAAAG	GCTACCTCTC	2160
97	TTACTAGCCC	CGTCTGAAG	GCGCCCTTCC	CCAAGGAGCT	TATGCAGCTC	CCTGAGGAGA	2220
98	CCATTGCTGC	CATCGACGTG	TCCTTCGAGA	ACATCCGCAA	GTTCCACGCC	GCCCAGAAGG	2280
99	AGGAGAAGCC	CCTCCAGGTC	GAGACCATGC	CCGGTGTGTG	CTGCAGCCGT	TTCTCTCGTC	2340
100	CCATCGAGGC	CGTCGGCTGC	TACATCCCCG	GCGGTACCGC	CGTTCTCCCC	AGCACTGCCC	2400
101	TTATGCTGGG	TGTTCCCGCC	ATGGTCGCCG	CTGCAACAA	GATTGTGTTC	GCCTCTCCTC	2460
102	CCCGCGCCGA	CGGAACCATC	ACTCCCGAGA	TTGTCCACGT	CGCTCACAA	GTTGGGGCCG	2520
103	AGTCCATCGT	GCTTGCCGGC	GGTGCCAGG	CCGTAGCTGC	CATGGCCTAC	GGCACCGAGA	2580
104	GCATCACCAA	GGTCGACAAG	ATTCTCGGCC	CCGGTAACCA	GTTGCTCACT	GCTGCCAAGA	2640
105	TGTTGCTCAG	CAACGACACC	AACGCTGCCG	TTGGGATTGA	CATGCCCGCT	GGCCCGTCCG	2700
106	AGGTGCTGGT	CATCGCTGAC	AAGGACGCCA	ACCCGCGGTT	CGTTGCCCTC	GATCTCCTGT	2760
107	CCCAGGCTGA	GCACGGCGTT	GACAGTCAGG	TCATCCTGAT	CGCTATTAA	CTCGACGAGG	2820
108	AGCATCTTCA	GGCTATTGAG	GACGAGGTTT	ACCGTCAGGC	TATGGAGCTT	CCTCGCGTCC	2880
109	AGATTGTCCG	TGGCTCCATC	GCCCACTCGA	TCACCGTGCA	GGTCAAGACC	GTCGAGGAGG	2940
110	CCATGGAGCT	CAGCAACAAG	TACGCTCCTG	AGCACTTGAT	CCTCCAGATC	AAGGAGGCCG	3000
111	AGAAAGCTGT	CGATCTTGTC	ATGAACGCTG	GTAGTGTCTT	CATTGGCGCT	TGGAATCCTG	3060

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112	AGTCCGTTGG	CGATTACTCT	GCTGGTGTTA	ACCACTCGCT	GCGTAAGTTA	CATATCATAA	3120
113	ATAGCCCCGC	TTCACAGATT	CTTCTGCTAA	CGTCAAGACA	CATAGCTACC	TATGGTTTGT	3180
114	GCAAGCAGTA	CTCTGGCGTC	AATCTCGCCT	CGTTCGTCAA	GCACATTACC	AGCTCCAAC	3240
115	TGACTGCCGA	GGGTCTCAAA	AACGTCGGCC	AGGCTGTCAT	GCAGTTGGCT	AAGGTTGAGG	3300
116	AGCTCGAGGC	TCACAGAAGG	GCGGTCAGCA	TCCGTCTTGA	GCACATGAGC	AAGAGCAACT	3360
117	AGACGGAAT	TCTTTTTCGA	AGTTGCAAAA	AAAACAAGAA	CAAAAGGATG	TAGTGGGTTG	3420
118	ATGTATATCT	GGGTCATTTT	GGGCACATAG	AGTAATGATA	ACGAGTTTGT	GACATTGTAC	3480
119	TGTTCTGTAC	AGGCTGAAGA	TCAGTACATG	AATCTGTTGG	TAAGTGTAGA	GACCCAAACG	3540
120	TCCCTTGAGT	TTTTCTCCCT	GTTCCAGAGA	GGTGCTCGTC	CCTGGGTGTT	TATTTTCATT	3600
121	ATTACATCAA	CCTTTTATTT	TATTTTATTT	TTTATTTTAC	TTTTTTTCC	TTTTTTTCAG	3660
122	ATCATGCGTA	CATGAACGGG	GGAAGCACAG	ACGATCGAAA	CGTGGATGTC	ACAATGTCGC	3720
123	TGCAGTGATG	CTGCATTGCA	TGAAGCGCCC	ATCTCAATAT	ACTTGCAGTC	TTGCGCGTTG	3780
124	CACGTGAAC	TCCCAAACAA	CCGAATAAAA	GACGGCGAAA	AATGAAGATA	AAAAAAAACC	3840
125	ATAATAAAAA	TCGGAGGGAG	TGTGGGAAAT	GGTTTCTTTT	AGCATTTAGA	CCCATAGCC	3900
126	GTGCACGCCC	GGGTACAGAC	AGGTTTCATCG	ATGTTGACAT	TGACTGGGAC	ACCAGGTCTA	3960
127	TGTATTTTCT	CTCCTGTCCT	CTACCATACA	TCGGGACATC	GGACATCTCG	CTGTACCCCC	4020
128	CACACCCACA	AAGTCTTATA	AAAGCGCCAC	ACCCGAGGAG	GTTCCGTCGG	CCCCACGAAC	4080
129	TCCGTGCCTC	CCTGCCTGTT	TACAGGGACC	GAACGCTGGA	GAAGCTTAGT	TTCCTGACAT	4140
130	CCGGCCTACC	CGAGCAGGAA	AAGGGACAGC	TCATAGGCGA	GGAGGGATTT	GAAGATGGGG	4200
131	ACATTTTGGA	TGATTTCGAG	GGAGGAAC	GGTACTGTAT	CATGATAGTT	CGGGGCAGCA	4260
132	TCTTGCTGG	GACATTGTTA	ATACCTCGAT	ATGATGAAGT	GGGAGGGAGT	TTTTTCATGT	4320
133	CTTGCCCAAG	TCCCACTAAT	CTTTTTTTTT	TTTTGTACCA	ACACCCAAGA	TTCCGAGAAT	4380
134	AGTGTAAGGA	TTCGCATTCA	CAAGTGGAAG	TCTGAGGATC	TTTTTATATC	TTTGTCTTCC	4440
135	GCGGACTGTT	AACGATCCTA	CAGCGAGCGA	GCGAGCGGTC	GGATGCGCTG	ATCTGATAGG	4500
136	TGCAATATAC	GGCCGCTTTC	TCCGGTCTGT	TAGTGTAAGC	TCTGTCGGCA	TAGTAGTACA	4560
137	CTAAAAAAC	CCTTGCAATTT	CATGATCTGC	TTGCTATTCA	TTCCGAGTTA	TTTCAGTGGT	4620
138	CACATTTTCA	GATTCACAGC	CATCCATCCA	TATGGAAAAA	TCCATTCCCA	TGCTTCTCTC	4680
139	CCCCCACTAT	GTATGTGACC	ACACGCTGCT	GTCAGAATGC	CAACGGTCTC	AGGTACCCTC	4740
140	GTCCGACTGT	TTGGCATGGA	GTTACATACA	CTACTAGTGT	AGCCCCGGGC	CAAGCTACCC	4800
141	CGTCAATCT	ATACATATCT	ATAATGGGTT	TCAGGTGTTT	CGTTCGCTGT	CAATCAAGTT	4860
142	TGAAACATCA	CTGGGGCCGT	TGGACGGTGT	ATTAGACCAT	TGGCTCCCTC	AGCTGGCGGC	4920
143	TGGGCGGTTG	GGTCGGCAAT	AACGGGACTG	GACTTGAGAG	GGACGAGGAG	AGTCGGTTGG	4980
144	CTGCCTACAC	TACACTACAA	GCGTTCACAC	CTAACCGACG	AGTCCCGTTT	TCCATTTGTG	5040
145	TGCCTTAACC	ATCATCTAGG	GATGTCAGGG	TTTGGCCGGA	TCAGGGTATG	TTTGGTTGAC	5100
146	TGTTGTTCAT	TCTGATTGGG	TACATATCAT	GGTAGGTGTC	TCGAGAACAG	TAGAGTACTC	5160
147	GGGCCTAGCG	TTTGATGAT	TACGCGAGAT	ATGAGTTGTA	GGCCGCCATG	CAGTTGCTTG	5220
148	CCCATAAGCA	GAAGTTGCTT	TGGGATATAT	TTCTCGTCTT	TCAAAGGTCA	CGAGGTCCTG	5280
149	GGACGAGCGG	CATCGCCATC	CAAAGGGTTG	AACATGAGAA	ACCGGAATGG	CCTTTGCGTT	5340
150	GAAATACAAA	AAGTCAAGAA	TAAAATCGCT	TGAGGATAGG	GACGTGGAAG	CAAGCAAATA	5400
151	TGGTAAGGGA	GGTACTGCTA	TGTAGGTGCT	CAGCAAAC	CCAATTTCTT	GGCCCCAAG	5460
152	CAGCAGTTTG	CTGTCACTGC	TGCTCGTGTC	AGCCTTGTTA	GTGGAACCTA	AACTGCTAAC	5520
153	ACAGCGCAAG	TGCGCATGTA	AAGATATTGT	GGGAGGATCT	GTATGGATGG	ATGAGATTAC	5580
154	TGCTTGGTGT	TGGTTGCGAG	GCACTGCGGC	TGTTAGGCTT	TGCTGTGCCC	CGTTGACGCA	5640
155	AGAAATACGC	GGAACATAA	ATTGGATACC	TAGACTTACT	GCCTATGGGA	GGTATCTACC	5700
156	GACGTAGCCG	ACGGATTCTA	GCAACATCCC	GACTTTGCTT	GTAGTGTACT	ATGATAGCAG	5760
157	CACAGTGGGG	TGTTGCTCCT	TGTGAGCATG	GGCTCTTTTT	TTTTTTTCC	CCCTTCCCTA	5820
158	GGGCGTTGAC	TGGACTTGCT	CTATCGTTCC	CAAGGTAGGT	GCCCGTCATC	GATTTTCCCA	5880
159	AGCCGTCTCC	CGCCAGATTG	TCGTCATAGT	GTCATGATGA	CCTCGGTCGC	TGGGGCTGCG	5940
160	TGGTTACGGG	GAGCTGGGAC	CGCTAGGCCT	CAGTGGTTGT	GCCATTCAGC	GTGGGTGTGT	6000

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161	GGAGTAGCGG	TAGAGGCGCT	TGGAAGTTGT	GCTAGCGGAA	ACCCTGGAAT	ATCTTGTACC	6060
162	CTTCGATTCC	TTCTCGGGCT	GCCCATGTGC	TGAGGTGATG	CCGGGGATCT	GGCGCCAATC	6120
163	ATCCATTGAG	GTTCCCGCAG	CTTCCCGGTG	CCGCGCGCGG	GCGCAGTTGC	TCACAGGACA	6180
164	CACCTAGACG	CAGGGGCACA	GGGGCACCGT	TTGGTGTGCA	ACTGGGTACC	TGGTAGCTGT	6240
165	AGCAAGCACT	CCACCGTCTG	TGCAATCCCC	CAATCCACGG	CAGGAACTTA	GCACCGCCGC	6300
166	GGCACCAGAT	GAGCGAATCC	ATCCGCATTG	GATCCCAATT	CTTGCCCTTG	CCATCCTTCT	6360
167	TTCTTCCCAC	TTGGCGCAAC	CAACACTTCC	CTTGGTCTGG	GTACTCGTGT	TGATCTTCAC	6420
168	TCTCTTTTTT	TCTTGGGCGA	CCGACTTTTT	ATATCCGTCC	TTGCTTCCCC	CTGGCCGTTG	6480
169	TCGTTCTTTC	TACAACCTAC	TTCCGTTCAT	TATCCCCTTT	CTTGGTTCGG	TCGAGGACCC	6540
170	AAAAACAGAA	CAATTCCGGC	TCTTCCAGGT	GGCTTGGGTG	CGACTGTTTA	GCTCTTGACC	6600
171	ACTAGCCGCT	TACCTTCTCT	TGATGTTTAT	ATTTGGATAT	CATTGAACTA	CTCTTTCTTG	6660
172	AAACGGCAGA	CGAACGGAAC	AGTCCCTACG	GTTTATTAGC	GATATACGTT	GTACTGATAT	6720
173	CCTGAGCAAG	AAGAGGCAAA	TTATCAATTA	TGCATCTCCC	ATCGTCGCTG	CTCATCGCAG	6780
174	CTCCCTTGCT	CGCCAATGTA	TCGGCCGAAC	CGATTAGGAT	ACCCCAACGC	GATGTTCTCC	6840
175	GTGGTATCAA	CATCACAGCA	ACTTGCCGTT	CGAGCACTAC	CGAATTTCGCC	CAGCGGTGGA	6900
176	TATGCCCTTG	CCGTTGTAGA	CTGTCCCAAG	ACCAAGCCGA	CGCTCCGGAA	GGCCGTGGAT	6960
177	TTGTGCAACG	AGGAGAAGAA	CTGGTTGTCT	ATCCGGAGGA	AGAACACCAT	CCAGCCCATG	7020
178	AGGGACCTAC	TGAAGAGGGC	CAACATCACT	GGGTTTCGAT	CCGAAACTTT	CATGAATGAG	7080
179	GCCGCCAACA	ACGTCTCGCA	ACTGCCCAAT	GTCGCCATTG	CCATTTTCAGG	AGGCGGCTAT	7140
180	CGTGCCCTCA	TGAACGGCGC	CGGCTTCGTT	GCTGCTGCGG	ATAACCGGAT	TCAAAATACC	7200
181	ACGGGCGCAG	GTGGTATTGG	AGGCTTGTTG	CAGTCAGCA	CATATTTGTA	TGTAAAAACCA	7260
182	TGCCTTCTTG	TGGTTCTTCT	TATCTCGTTT	TCGAGTGTCA	ACTGCGCCAG	TTTCAGCTTG	7320
183	GGCGCTGTG	GACGACCTTG	CTGGTGAACA	TGTCTTGAC	TCCATGCCCC	TTTTTTCGTT	7380
184	CCCTAAAAATC	CCAAAAAATA	AAAAAATAAA	AAAAAATAAA	AAAAAATAAA	AAAATTCGAG	7440
185	GACCGTGACT	GTAATTTGCT	AACGCAACTC	TAGGGCCGGA	CTTCTGGTG	GTGGCTGGCT	7500
186	TGTCGGCAGT	TTGTTCTCCA	ACAACCTCAG	TAGCATTGAG	ACCCTGCTGA	GCGAGAACAA	7560
187	AGTCTGGGAC	TTTGAGAACT	CCATCTTTAA	AGGACCCAAG	GAGGCTGGCC	TTAGTACTGT	7620
188	CAACCGTATC	CAGTACTGGT	CCGAAGTGGC	AAAGGAAGTT	GCGAAGAAGA	AGGATGCTGG	7680
189	CTTCGAGACA	AGTATAACAG	ACTACTGGGG	CCGAGCATTG	AGTTACCAAC	TGATCGGAGC	7740
190	CGATATGGGC	GGCCCGGCTT	ACACCTTCTC	CAGCATTGCC	CAGACCGACA	ACTTCCAGAA	7800
191	GGCCGAAACG	CCGTTCCCTA	TTCTGGTAGC	TGACGGCCGC	GCGCCTGGAG	ACACCATCAT	7860
192	CTCCCTCAAT	GCTACCAACT	ACGAGTTCAA	CCCGTTCGAG	ACGGGTAGCT	GGGACCCGAC	7920
193	CGTCTATGGC	TTTGCGCCGA	CCAAGTACCT	CGGCGCCAAC	TTTCAGCAACG	GCGTGATCCC	7980
194	ATCGGGAGGC	AAGTGCGTTG	AGGGTCTCGA	CCAAGCCGGC	TTTCGTCATG	GCACCAGCAG	8040
195	CACGCTCTTC	AACCAAGTTC	TTTTGGCCAA	CATCTCCAGC	TACGACGGTG	TTGCCAGACG	8100
196	TGCTCATCGA	GGCCGTGACT	TCTGTCTCTA	AGGAAATCGG	CGCCAAGAGG	ACGACGTCTC	8160
197	CCAAATCATC	CCTAATCCGT	TCCTGGACTG	GAACAACCGG	ACCAACCCCA	ACGCCGACAC	8220
198	GCTCGAGCTC	GACCTGGTCT	ACGGCGGCGA	AGATCTGCAG	AATATTCCGC	TCAACCCGCT	8280
199	CACCAACCCC	GTGCGCGCCG	TCGACGTCAT	CTTCGCTGTC	GACTCGTCCG	CCGACGTGAC	8340
200	AAACTGGCCC	AATGGCACCG	CCCTGCGCGC	CACCTACGAG	CGCACTTTTC	GCTCTATTTT	8400
201	CAACGGGACA	CTCTTCCCCT	CGATCCCCGA	CGACTGGACG	TTTATAAACC	TAGGCCCTCAA	8460
202	CAACCGCCCC	TCTTTCTTCG	GCTGCGATGT	TAAGAACTTT	ACCTTGAACG	CCAACCAAAA	8520
203	GGTTCCCCCC	TTAATCGTCT	ATGTCCCCAA	CGCGCCCTAT	ACCGCGCTGA	GCAACGTGTC	8580
204	CACCTTCGAT	CCGTCATACA	CGATGTCTCA	GCGCAACGAC	ATCATCGGCA	ACGGATGGAA	8640
205	CTCAGCCACG	CAGGGAAACG	GCACGCTGGA	TTCGGAGTGG	CCCACTTGCG	TCGCCTGCGC	8700
206	GGTTATCAGC	AGGAGCTTAG	ATCGGTTGGG	CAGGCAGACG	CCAGCCGCGT	GCAAGACTTG	8760
207	CTTTGACAGG	TATTGCTGGA	ATGGCACAGT	GAAGTCCAAA	GATACGGGGG	TTTACATGCC	8820
208	TGAGTTCAAG	ATTGCGGATG	CGCATGCCCT	GGACTCGGGT	GCTGTTGCTA	TCGGAAAGAT	8880
209	GGTGAATGTC	TGGTCGTCGG	TTGTGGTGGG	AGTTGTGGCG	GCTACTTTGT	TGTTGTAGGG	8940

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210	GTAGGGGAGA	CGTGATGATA	TTCCAGTCTG	ATGAAGTTGA	GAAGTGGACTG	GAGATCGCCA	9000
211	AGGATGCGGA	GGGAAAGGAA	TGCGTGGTGT	TAATGTCATG	ATGGATGAAG	AGTCATGGAT	9060
212	CATGGAACGA	CGGGGCGGGG	ATATTGGATG	ATGGATATAC	CACACTGCAT	GCATGCTCTA	9120
213	TTGATAGTAT	GCTTTGGCAT	TTACGTTTAA	CAATCAATTG	CTCCATCCTG	ATGTTCTATC	9180
214	TTTTTCGACA	ATGGATTGAT	ACTACTCCTG	TTGCTTCGCT	CTTGAGGTTG	GAAGGACTTG	9240
215	AGGTGGAAG	GACTTGAGGT	TGTTTGTTCT	GAGGGAGGTT	ATCGAAGTAT	CATCTGTGCT	9300
216	GATGCCGATT	GATAGACTGT	CCTCTTCTTC	GAGGCAACGA	ACGGTCGGAT	GAGCCTCTTT	9360
217	AATCATGATG	CTCAGTGCCA	CAAAAAGGCT	CCAGCACAGC	TGCCCCACAC	TTTCTTGCCT	9420
218	CGCCGTTCTT	TCCTTTTTCT	TTTCCCCTGT	TTCTTTCTTT	CCTTTCCATC	TCATCCCGTA	9480
219	CCAGAGTGCC	CACCGGGTAT	ATATATTACC	TCCTTGGCCG	TTCTCCTTTG	ACCAATAAAT	9540
220	CGCTTGGTCG	AGTGGCGTAA	CGGTTTACCG	TCTACACTTA	TCACTCAAAC	CAAACCAAAC	9600
221	CATCGAAGAA	GTGACCTATC	GGTTCGAGGG	AACGGTGATG	TTCTTACGAC	CAAGTTAACC	9660
222	CAAAGAGCGT	TCCACATCGT	TGAACCGTCT	CCTCCAGTTG	GATCTGTTTA	ACTTCCGCAG	9720
223	CGACTGAAGA	AGGTATCACT	TTTTTTTTTG	TTCCAAAAAA	AAAAAAAAAA	ATTAC	9775

226 (2) INFORMATION FOR SEQ ID NO: 2:

228 (i) SEQUENCE CHARACTERISTICS:

229 (A) LENGTH: 9934 base pairs

230 (B) TYPE: nucleic acid

231 (C) STRANDEDNESS: single

232 (D) TOPOLOGY: linear

234 (ii) MOLECULE TYPE: Genomic DNA

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238	ACCGGGAATC	GTAGCGGGCG	CIAAGGCCAA	GCCGCGGCAC	GGGTCACTGA	CCCAATGCAG	60
239	CGCATTCGGT	CAGCAACTGA	AGTGGATGTA	CAAGTACATA	GTAGTAGATC	GCAACTGGAG	120
240	ATCACTCGCA	CCGTGCCGCA	GAACAAGGGC	GACGAGCCTC	AGGGCAGTTT	AGCCTGCCGT	180
241	AACAGCACAG	ACCATAGCTT	ATTTTACCTT	GGGCGGGCGG	GCGACGGCGG	CCTGACATC	240
242	GGCAAGGCGG	CATCAAGCAA	CCCCTCTGTT	GCTTGCCAGC	TGCCGGCCAA	CGTCAGCGGT	300
243	ACAAGGAGAA	ATCTGGAAGG	AAAGACTTCT	GGCACCGACA	GGATGGCAGC	CGGGAAAAGT	360
244	TCCCAATGCA	TGAGATGAGG	GGCATTGCA	TTGCCTCCCG	TCACCCAGTG	CGAACCCCAA	420
245	CCCCACCATA	GCGTCTGTCT	ATACATGGAG	CGCGAAGTCG	AGAAACCTGT	AATTCCTGGT	480
246	AACTTTCAGG	TACACAGTAC	GTACTGATCC	TGGTATCAAA	CCTTGCCCTG	CGAGTTTTCG	540
247	ACGGAAAGAG	GTGTGAATTG	TGAAAGAGTC	ATACCAAATC	ACCCGATTTT	CATAAAGCCC	600
248	GAGTCTTTTC	TGTACATAAG	CGACACTCGA	AGCGGGCCTC	ATCTTCATAG	CCTGATAGCT	660
249	TGTAATACTC	CATCCTCGTA	TCTCACTTGA	CCTTGAGTTC	AACCCACAGT	CAAACCTCAC	720
250	CCGACACATC	GACGGATTGG	GGAACAGCAC	AATACCTGAA	AAGCGAGAAA	ACCAAACAGA	780
251	GGAAAACACC	ATGGAGACAA	CACTTCCCCT	CCCCTTCCCT	GTCGGTGTCA	GTGTTCCCTC	840
252	CGGACTGAAT	GACATCAAGG	AGGGCCTCAG	CCGGGAGGAA	GTCTCGTGTC	TTGGCTGCGT	900
253	CTTCTTCGAG	GTCAAGCCCC	AGACCCTTGA	GAAAATCCTG	CGATTCCCTCA	AGCGTCACAA	960
254	TGTCGAATTT	GAGCCCTACT	TCGATGTAAC	AGCCCTCGAG	TCTATCGATG	ATATTATCAC	1020
255	TCTTCTGGAC	GCCGGCGCCC	GCAAGGTGTT	TGTCAAGACC	GAGCAGTTGG	CCGACCTCTC	1080
256	CGCATATGGC	TCCCGCGTTG	CCCCCATTGT	CCTGGAAGC	AGCGCTGCTT	TGCTTTCCTC	1140
257	CGCCACCGAG	AGCGGCCTTT	TGCTCTCCGG	CTTCGATCAG	ACTGCCTCCG	AGGCTGCACA	1200
258	GTTTCTGGAG	GAGGCCAGAG	ACAAGAAAAT	TACCCCTTTC	TTCATCAAGC	CCGTTCCCTG	1260
259	GGCCGATCTC	GAACAGTTCA	TCCAGGTCGC	CGCCAAGGCT	AACGCCATCC	CCATCCTGCC	1320
260	ATCCACTGGC	TTGACAACAA	AGAAGGACGA	GGCCGGCAAG	CTTGCCATCT	CCACCATCCT	1380
261	CTCGAGCGTC	TGGAAGTCTG	ACCGTCCCGA	TGGTCTTCTC	CCCACCGTTG	TCGTTGATGA	1440
262	GCACGACACT	GCTCTGGGTC	TGGTCTACAG	CAGTGCCGAG	AGTGTGAACG	AGGCCCTCAG	1500
263	GACACAGACT	GGTGTCTATC	AGAGCCGGAA	GCGCGGTCTC	TGGTACAAGG	GTGCTACTTC	1560
264	CGGAGACACT	CAGGAGCTCG	TCCGCATCTC	GCTTGACTGC	GATAACGATG	CTCTCAAGTT	1620

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/751,962

DATE: 01/24/2002

TIME: 18:46:53

Input Set : N:\Crf3\RULE60\09751962.raw

Output Set: N:\CRF3\01242002\I751962.raw

L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:411 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2